



# Adolescents and Young Adults

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## Introduction

The proportion of people diagnosed with HIV infection in Massachusetts who are adolescents and young adults (defined as age 13 to 24 years) is lower than observed on the national level. Overall, 7% of the HIV diagnoses within the three-year period 2003 to 2005 were reported in those between the ages of 13 and 24 years old. Within Massachusetts, HIV infection among adolescents varies by gender, race/ethnicity and geography. Regarding gender, 10% (N=81) of females diagnosed with HIV infection within the three-year period 2003 to 2005 were between the ages of 13 and 24 years old compared to 6% of males. Among black (non-Hispanic) and Hispanic individuals, 10% and 8% were adolescents, respectively, compared to 5% of white (non-Hispanic) individuals diagnosed with HIV infection during this time period. The following describes adolescents and young adults recently diagnosed with HIV infection and living with HIV/AIDS in Massachusetts.

## General Statistics:

- Within the three-year period 2003 to 2005, 201 adolescents and young adults were diagnosed with HIV infection, accounting for 7% of all diagnoses reported in Massachusetts.
- On December 31, 2005, 402 (2%) people living with HIV/AIDS were 13-24 years old. Of people living with HIV/AIDS in Massachusetts, 1,504 (10%) were diagnosed with HIV infection at ages 13-24 years.

## Regional Distribution:

- Eight percent of people in the Boston, Central, Metro West and Northeast HSRs were diagnosed with HIV infection as adolescents and young adults within the three-year period 2003 to 2005 (HSRs), compared to 6% in the Southeast and Western regions.

- Within the three-year period 2003 to 2005, the city of Boston had the largest number of people diagnosed with HIV infection at ages 13-24 years of 62 (8% of HIV infections diagnosed).

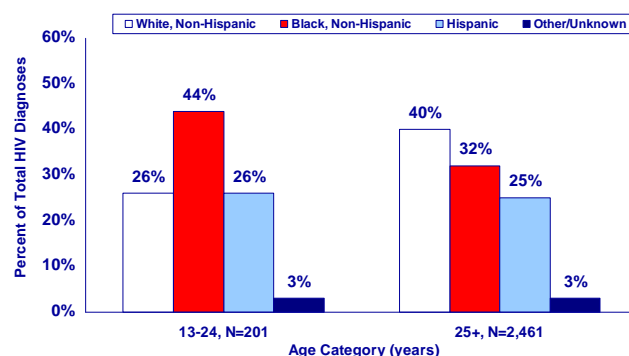
Among cities with over 20 people diagnosed with HIV infection within the three-year period 2003 to 2005, the following have the highest proportions diagnosed during adolescence and young adulthood (N=number of adolescents diagnosed):

- |             |     |        |
|-------------|-----|--------|
| • Chicopee  | 19% | (N=5)  |
| • Waltham   | 17% | (N=5)  |
| • Lawrence  | 12% | (N=9)  |
| • Worcester | 10% | (N=14) |
| • Malden    | 10% | (N=4)  |

## Race and Ethnicity:

- Among adolescents and young adults diagnosed with HIV infection within the three-year period 2003 to 2005, 44% were black (non-Hispanic), compared to 32% of people diagnosed at age 25 years or above.
- Among adolescents and young adults living with HIV/AIDS on December 31, 2005, 39% are black (non-Hispanic), compared to 27% of people 25 years or older.

**Figure 1. People Diagnosed with HIV Infection Within the Years 2003 to 2005 by Age at HIV Diagnosis and Race/Ethnicity: Massachusetts**

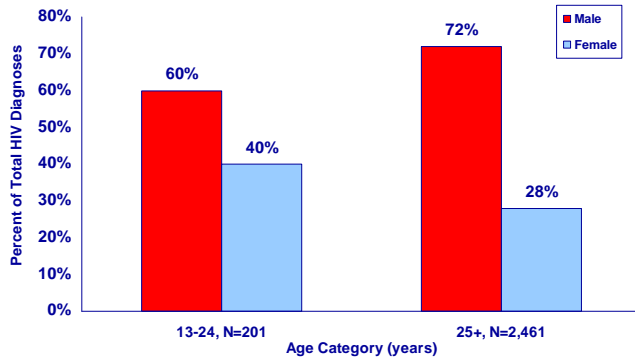


Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 7/1/06

## Gender:

- Adolescents and young adults diagnosed with HIV infection within the three-year period 2003 to 2005 were 60% male and 40% female. In contrast, 72% of people diagnosed with HIV infection at age 25 years or above were male and 28% female.

**Figure 2. People Diagnosed with HIV Infection Within the Years 2003 to 2005 by Age at HIV Diagnosis and Gender: Massachusetts**



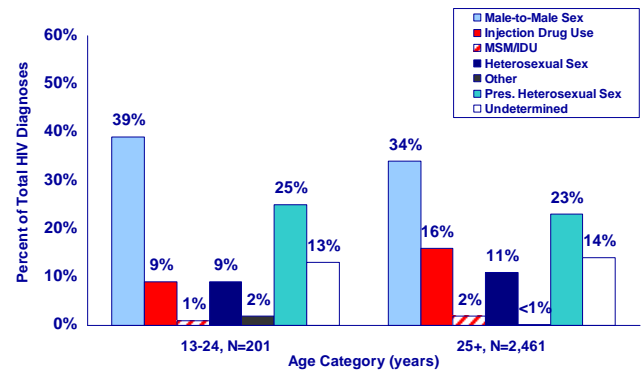
Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 7/1/06

- Among individuals living with HIV/AIDS who were ages 13-24 years on December 31, 2005, 45% are female, compared to 28% of those age 25 years and older.

## Exposure Mode:

- A greater proportion of adolescents and young adults recently diagnosed with HIV infection was exposed through male-to-male sex than among people diagnosed at age 25 years or above. A smaller proportion was exposed through injection drug use and a similar proportion was exposed through heterosexual sex with partners with known risk or HIV status.

**Figure 3. People Diagnosed with HIV Infection Within the Years 2003 to 2005 by Age at HIV Diagnosis and Mode of Exposure: Massachusetts**



Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 7/1/06

- Among individuals living with HIV/AIDS who were ages 13-24 years on December 31, 2005, smaller proportions were exposed through injection drug use (4% vs. 27%) and male-to-male sex (21% vs. 34%). Forty-four percent were born to infected mothers and exposed at or around birth.

## Perinatal and Pediatric Exposure to HIV Infection Among Adolescents Living with HIV/AIDS:

- Among 290 children and young adults living with HIV/AIDS who were exposed to HIV perinatally or through other means at age 13 and under, 176 (61%) are currently age 13-24 years old.

Of these 176 individuals:

- Fifty-five percent are male and 45% are female
- Thirty-eight percent are Hispanic, 37% are black (non-Hispanic), and 24% are white (non-Hispanic).

## Exposure Mode and Gender:

- A higher proportion of adolescent and young adult males diagnosed with HIV infection within the three-year period 2003 to 2005 were exposed to HIV through male-to-male sex than among men age 25 years and above diagnosed with HIV infection (66% vs. 47%). Conversely, a lower proportion was exposed through injection drug use (8% among 13-24 year olds vs. 15% among 25+ year olds).

- A larger proportion of adolescent and young adult females diagnosed with HIV infection within the three-year period 2003 to 2005 were presumed exposed to HIV through heterosexual sex with partners of unknown risk and HIV status (presumed heterosexual sex) than among women age 25 years and above with HIV infection (48% vs. 44%). Conversely, a smaller proportion was exposed through injection drug use (11% among 13-24 year olds vs. 16% among 25+ year olds).

### Exposure Mode and Race/Ethnicity:

Exposure mode among people age 13-24 years, diagnosed with HIV infection within the three-year period 2003 to 2005, varies by race/ethnicity.

- Among **white (non-Hispanic) adolescents and young adults**, male-to-male sex is the predominant exposure mode, accounting for 62% of exposures.
- Among **black (non-Hispanic) adolescents and young adults**, presumed heterosexual sex with partners with unknown risk and HIV status (presumed heterosexual sex) is the predominant exposure mode at 43%.
- Among **Hispanic adolescents and young adults**, exposure mode is more evenly distributed with male-to-male sex accounting for 30% and injection drug use and presumed heterosexual sex each accounting for 17% of exposures.

### Adolescents at Risk of HIV infection

**Behavioral Risk Factors:** According to school-based behavioral surveys, adolescents in Massachusetts are engaging in behaviors that put them at risk for HIV infection.

- Among 3,522 high school-aged respondents to the 2005 Massachusetts Youth Risk Behavior Survey (MYRBS), 46% reported ever using an illegal drug, 8% reported ever using cocaine, 2% reported ever using heroin and 2% reported ever using a needle to inject drugs.

- Fewer youth in 2005 than in 1995 reported the following: sexual intercourse before age 13 (from 8% in 1995 to 5% in 2005) and alcohol or drug use at last intercourse (from 31% in 1995 to 23% in 2005).
- Among sexually active respondents to the 2005 MYRBS, 65% used a condom at last intercourse – an increase from 56% in 1995.

### State-Funded HIV Counseling and Testing:

- Of 44,960 HIV tests performed in 2005, 30% (N=13,445) were among 13-24 year olds, of which 0.4% were positive.

### Data Sources:

HIV/AIDS Case Data: MDPH HIV/AIDS Surveillance Program, Data as of July 1, 2006

Youth Risk Behavior Survey Data: Massachusetts Department of Education, Youth Risk Behavior Survey

HIV Counseling and Testing Data: MDPH HIV/AIDS Bureau, Office of Research and Evaluation

### Additional References of Interest:

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*For more detailed information and a description of data limitations please see "HIV/AIDS in Massachusetts: An Epidemiologic Profile," available online at [www.mass.gov/dph/aids](http://www.mass.gov/dph/aids)*